Absolute Subsea Gauge – Stainless Steel
Type PG23SUB.063 & PG23SUB.100

Applications

- Suitable in non-compensated subsea environments: Tested to working depths of up 10,000 feet of sea water.
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system.
- Measures pressure relative to sea level.

Special features

- All 316L stainless steel construction
- Case pressure-resistant to ocean depths of 10,000 feet
- Positive pressure ranges up to 20,000 psi
- Black dial face with white enlarged numerals for subsea visualization
- Magnifying acrylic window, rated to withstand pressures at 10,000 feet

Standard Features

Design
ASME B40.100

Sizes
2½" & 4"

Accuracy
2½": ±2/1/2% of span per ASME B40.100 Grade A
4": ± 1% of span per ASME B40.100 Grade 1A

Ranges*
Vacuum / Compound to 200 psi
Pressure from 0/15 psi to 0/20,000 psi or other equivalent units of pressure or vacuum

*Note: The maximum ocean depth in which the gauge is operating at might be considered when selecting the pressure range

Working pressure
2½": Steady: ¾ scale value
- Fluctuating: 2/3 full scale value
- Short time: Full scale value

4": Steady: Full scale value
- Fluctuating: 0.9 x full scale value
- Short time: 1.3 x full scale value

Operating temperature
Ambient: - 40°F to + 140°F (-20°C to + 60°C) dry
Media: Maximum +392°F (+ 200°C) dry

Temperature error
Additional error when temperature changes from reference temperature of 68° (20°C) ± 0.4% of span for every 18°F (10°C) rising or falling.

Weather protection
IP 68
Protected against continuous submersion in up to 10,000 feet of ocean depth.

Pressure connection
Material: 316 stainless steel
Center back mount (CBM) for size 2½"
Lower back mount (LBM) for size 4"
¼"NPT (size 2-1/2") and ½"NPT (size 4")
(other connections on inquiry)

Bourdon tube
316L stainless steel
≤ 1,000 psi: C-type Bourdon tube
≥ 1,500 psi: Helical type
**Movement**  
Stainless steel

**Dial**  
Black aluminum (matte finish) with white lettering; 2-1/2” with stop pin

**Pointer**  
White aluminum, adjustable

**Case**  
Pressure tight case for continuous submersion in up to 10,000 feet of ocean depth  
316L stainless steel matte finish, with integrated front flange and three mounting holes for panel mounting

**Bezel ring**  
Screw type, 316L stainless steel, matte finish

**Window**  
Magnifying acrylic window (rated to withstand pressures at 10,000 ft ocean depth)

**Optional extras**
- Special process connections (limited to wrench flat size)
- Custom dial layouts
- Restrictor (NPT connections only)

**Dimensions**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
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</thead>
<tbody>
<tr>
<td>2½”</td>
<td>in</td>
<td>4.33</td>
<td>3.88</td>
<td>0.27</td>
<td>0.24</td>
<td>2.95</td>
<td>0.87</td>
<td>3.4</td>
<td>0.55*</td>
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<tr>
<td></td>
<td>mm</td>
<td>110.1</td>
<td>98.4</td>
<td>6.8</td>
<td>6</td>
<td>74</td>
<td>22</td>
<td>86.5</td>
<td>14</td>
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<tr>
<td>4”</td>
<td>in</td>
<td>5.83</td>
<td>5.31</td>
<td>0.33</td>
<td>0.31</td>
<td>4.26</td>
<td>0.98</td>
<td>4.8</td>
<td>0.87 1.18</td>
</tr>
<tr>
<td></td>
<td>mm</td>
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<td>135</td>
<td>8.4</td>
<td>8</td>
<td>108.2</td>
<td>25</td>
<td>122</td>
<td>22  30</td>
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*2½” gauge is center back mounted